

GIANNOZZI, M.
Appl. No. To be assigned
October 31, 2003

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.(original) A method for the treatment of organs subject to erosion by liquids, comprising the application of a cobalt-based alloy on the surface of said organs to form a layer of anti-erosion coating, wherein said alloy comprises:

chromium	from 28 to 32% by weight
tungsten	from 5 to 7% by weight
silicon	from 0.1 to 2% by weight
carbon	from 1.2 to 1.7% by weight
nickel	from 0.5 to 3% by weight
iron	from 0.01 to 1% by weight;
manganese	from 0.01 to 1% by weight;
molybdenum	from 0.2 to 1% by weight
cobalt	the complement to balance.

2.(original) The method according to claim 1, characterized in that said application is effected by means of laser plating (laser cladding).

3.(currently amended) The method according to claim 1 or 2, characterized in that said organs comprise the components of a vapour turbine.

4.(original) The method according to claim 3, characterized in that said components are vapour turbine blades.

5.(original) The method according to claim 2, characterized in that said laser plating is effected with a CO₂ or YAG laser.

6.(currently amended) The method according to ~~any of the previous claims 1-5~~ claim 1, characterized in that the layer of coating applied has a thickness ranging from 0.1 to 5 mm.

7.(currently amended) The method according to ~~any of the claims 1-6~~ claim 1, characterized in that it also comprises a preliminary heating phase of the surface of the organ to be treated.

8.(currently amended) The method according to ~~any of the claims 1-7~~ claim 1, characterized in that it comprises a series of application passages of said alloy.

9.(original) A cobalt-based alloy for the coating of organs subject to erosion by liquids, characterized in that it comprises:

chromium from 28 to 32% by weight

GIANNOZZI, M.
Appl. No. To be assigned
October 31, 2003

tungsten from 5 to 7% by weight
silicon from 0.1 to 2% by weight
carbon from 1.2 to 1.7% by weight
nickel from 0.5 to 3% by weight
iron from 0.01 to 1% by weight;
manganese from 0.01 to 1% by weight;
molybdenum from 0.2 to 1% by weight
cobalt the complement to 100%.

10.(original) The cobalt-based alloy according to claim 9, characterized in that it has the following composition:

Cr	30 g
W	6 g
Si	1 g
C	1.5 g
Ni	1.5 g
Fe	<0.3 g
Mn	<0.3 g
Co	48 g
Mo	0.75 g
Other (Imp.)	<0.25 g

11.(original) The cobalt-based alloy according to claim 9, characterized in that it has the following composition:

Cr	30 g
W	6 g
Si	1 g
C	1.5 g
Ni	1.5 g
Fe	0.20 g
Mn	0.20 g
Co	Balance
Mo	0.75 g
Other	0.20 g

12.(original) The cobalt-based alloy according to claim 9, characterized in that it has the following composition:

GIANNOZZI, M.
Appl. No. To be assigned
October 31, 2003

Elem.	Quantity
Cr	28 %
W	5.1 %
Si	0.1 %
C	1.2 %
Ni	0.5 %
Fe	0.01 %
Mn	0.01 %
Mo	0.2 %
Co	Balance
Other (Imp.)	0.01 %

13.(original) The cobalt-based alloy according to claim 9, characterized in that it has the following composition:

GIANNOZZI, M.
Appl. No. To be assigned
October 31, 2003

Elem.	Quantity
Cr	31.5 %
W	6.5 %
Si	1.8 %
C	1.6 %
Ni	2.8 %
Fe	0.9 %
Mn	0.8 %
Mo	0.9 %
Co	Balance
Other (Imp.)	0.005 %

14.(original) The cobalt-based alloy according to claim 9, characterized in that it has the following composition:

Elem.	Quantity
Cr	30 %
W	6 %
Si	1 %
C	1.5%
Ni	1.8%
Fe	0.5 %
Mn	0.3 %
Mo	0.3 %
Co	Balance
Other (Imp.)	0.05 %

15.(currently amended) An organ or end-product subject to erosion by liquids, characterized in that it comprises a surface coating layer to prevent erosion from liquids based on an alloy according to ~~any of claims 9-14~~claim 9.

16.(original) The organ or end-product according to claim 15, characterized in that it is a component of a vapour turbine.

17.(original) The organ or end-product according to claim 16, characterized in that said component is a blade of a vapour turbine.

GIANNOZZI, M.
Appl. No. To be assigned
October 31, 2003

18.(currently amended) The organ or end-product according to ~~any of the~~
~~claims 15-17~~claim 15, characterized in that said surface coating has a thickness ranging
from 0.1 to 5 mm.